



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/822,778

04/13/2004

Yuichi Futa

2004_0582A

3192

513

7590

04/16/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

HENNING, MATTHEW T

ART UNIT

PAPER NUMBER

2131

MAIL DATE

DELIVERY MODE

04/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,778	Applicant(s) FUTA ET AL.	
	Examiner MATTHEW T. HENNING	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/9/04; 1/13/05</u> | 6) <input type="checkbox"/> Other: _____ |

1 This action is in response to the communication filed on 4/13/2004.

2 **DETAILED ACTION**

3 Claims 1-17 have been examined.

4 ***Title***

5 The title of the invention is not descriptive. A new title is required that is clearly
6 indicative of the invention to which the claims are directed.

7
8 ***Information Disclosure Statement***

9 The information disclosure statement(s) (IDS) submitted on 11/9/2004 and 1/13/2005 are
10 in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the
11 information disclosure statements.

12 ***Drawings***

13 The drawings filed on 4/13/2004 are acceptable for examination proceedings.

14 ***Claim Rejections - 35 USC § 101***

15 35 U.S.C. 101 reads as follows:

16 Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
17 any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
18 requirements of this title.

19
20 Claims 13 and 16 are rejected under 35 U.S.C. 101 because the claimed invention is
21 directed to non-statutory subject matter. Claims 13 and 16 are directed towards "programs"
22 which are not tangibly embodied. Computer programs claimed as computer listings *per se*, i.e., the
23 descriptions or expressions of the programs, are not physical "things." They are neither computer
24 components nor statutory processes, as they are not "acts" being performed. Such claimed computer
25 programs do not define any structural and functional interrelationships between the computer program

Art Unit: 2131

1 and other claimed elements of a computer which permit the computer program's functionality to be
2 realized. In contrast, a claimed computer-readable medium encoded with a computer program is a
3 computer element which defines structural and functional interrelationships between the computer
4 program and the rest of the computer which permit the computer program's functionality to be realized,
5 and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to
6 distinguish claims that define descriptive material *per se* from claims that define statutory inventions.

7 ***Claim Rejections - 35 USC § 102***

8 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
9 basis for the rejections under this section made in this Office action:

10 *A person shall be entitled to a patent unless –*

11
12 *(b) the invention was patented or described in a printed publication in this or a foreign*
13 *country or in public use or on sale in this country, more than one year prior to the date of*
14 *application for patent in the United States.*

15
16
17 Claims 1-3, 6-9, and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by
18 WO 01/84761 A for the reasons provided in the International Search Report for
19 PCT/JP2004/005083.

20 Claims 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by WO
21 02/095553 A for the reasons provided in the International Search Report for
22 PCT/JP2004/005083.

23 Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/27723 A for
24 the reasons provided in the International Search Report for PCT/JP2004/005083.

25

26

1
2 Claims 1, 2, 6, and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by
3 Caputo et al. (US Patent Number 5,778,071) hereinafter referred to as Caputo.

4 Regarding claims 1, 2, 6, and 12-17, Caputo disclosed an apparatus authentication system
5 which comprises a server apparatus and a client apparatus which perform a mutual authentication
6 when a content is transmitted from the server apparatus to the client apparatus for use therein
7 (See Caputo Fig. 3), wherein the client apparatus includes: a receiving unit operable to receive
8 challenge data from the server apparatus (See Caputo Col. 17 Lines 31-36); a signature
9 generating unit operable to generate signature data based on the received challenge data and a
10 first password (See Caputo Col. 17 Lines 37-46); and a transmitting unit operable to transmit the
11 generated signature data (See Caputo Col. 17 Lines 47-48), and the server apparatus includes: a
12 challenge data transmitting unit operable to generate and transmit the challenge data (See Caputo
13 Col. 13 Lines 25-42); a holding unit operable to hold a second password in advance (See Caputo
14 Col. 13 Lines 50-55); a receiving unit operable to receive the signature data from the client
15 apparatus (See Caputo Col. 13 Lines 49-50); an authentication unit operable to perform an
16 authentication of the received signature data based on the challenge data and the second
17 password (See Caputo Col. 13 Lines 55-59); and a content transmitting unit operable to, if the
18 authentication results in success, transmit an encrypted content to the client apparatus, the
19 encrypted content having been encrypted in such a manner that the encrypted content can be
20 decrypted by the client apparatus (See Caputo Col. 16 Lines 28-36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo as applied to claims 2 and 6 above.

Although Caputo did not specifically disclose that the passwords were registered by inputting them at the client, transmitting them to the server, and storing them at the server, it was well known in the art at the time of invention to register passwords with a server in this manner. As such, it would have been obvious to the ordinary person skilled in the art to have registered the passwords into the server in this manner. This would have been obvious because the ordinary person skilled in the art at the time of invention would have been motivated to allow a user of the system the flexibility to register a password without requiring them to do so at the location of the server.

Claims 4-5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo as applied to claims 2 and 6 above, and further in view of Goertzel et al. (US Patent Number 6,308,273).

Art Unit: 2131

1 While Caputo disclosed the claimed challenge-response system and method, Caputo
2 failed to specifically disclose determining which of two varying length passwords to use based
3 upon the distance between the client and the server.

4 Goertzel teaches that by gathering location information about the client, the
5 authentication itself may be made dependent on the location of the user by increasing the
6 security of the authentication when the client is remote from the server and allowing less secure
7 authentication when the client is local to the server (See Goertzel Col. 17 Lines 27-45).

8 Furthermore, it was well known in the art at the time of invention, that longer passwords provide
9 more secure authentication than shorter passwords, while shorter passwords are more user
10 friendly and easier to remember.

11 It would have been obvious to the ordinary person skilled in the art at the time of
12 invention to have employed the teachings of Goertzel in the password system of Caputo by
13 gathering location information about the client, and using shorter passwords when the client is
14 local to the server while using longer passwords when the client is remote from the server. This
15 would have been obvious because the ordinary person skilled in the art at the time of invention
16 would have been motivated to provide greater security to remote authentication while providing
17 convenience to the local users.

18 Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo as applied
19 to claims 2 and 6 above, and further in view of Hess et al. (US Patent Application Publication
20 2003/0018893) hereinafter referred to as Hess.

1 While Caputo disclosed the claimed challenge-response method being performed to
2 authenticate the client to the server, Caputo failed to disclose the challenge-response being
3 performed in the opposite direction in order to authenticate the server to the client.

4 Hess teaches that in order to provide mutual authentication, the challenge response
5 method is carried out twice, once in each direction (See Hess Entire Document, especially
6 Paragraph 0006).

7 It would have been obvious to the ordinary person skilled in the art at the time of
8 invention to have employed the teachings of Hess in the authentication system by carrying out
9 the challenge-response in both directions. This would have been obvious because the ordinary
10 person skilled in the art at the time of invention would have been motivated to protect the user
11 device from illicit server devices.

12 Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caputo as
13 applied to claims 2 and 6 above, and further in view of Bolle et al. (US Paten Number 6,819,219)
14 hereinafter referred to as Bolle.

15 Caputo disclosed the challenge response system as claimed, but failed to specifically
16 disclose that the registered password was input from outside the server device, or that the
17 registered password (authentication data) was biometric data, which is compared to user gathered
18 biometric data, and if within a threshold of each other the response to the challenge is generated.

19 Bolle teaches that in order to prevent the use of a stolen PIN number by an impersonator,
20 biometrics can be used, wherein upon receiving an authentication challenge, the challenged
21 device measures the user's biometric, compares it to a stored authenticated biometric, and if they

Art Unit: 2131

1 match, the reply to the challenge is sent to the querying system and the querying system can
2 verify the biometric as well (See Bolle Col. 1 Lines 14-31 and Col. 6 Lines 15-32).

3 It would have been obvious to the ordinary person skilled in the art at the time of
4 invention to have employed the teachings of Bolle in the challenge-response system of Caputo
5 by verifying a biometric of the user prior to transmitting the response to the challenge and having
6 the querying system verify the biometric. This would have been obvious because the ordinary
7 person skilled in the art would have been motivated to prevent the use of a stolen PIN number by
8 an impersonator.

9 *Conclusion*

10 Claims 1-17 have been rejected.

11 The prior art made of record and not relied upon is considered pertinent to applicant's
12 disclosure.

13 Any inquiry concerning this communication or earlier communications from the
14 examiner should be directed to MATTHEW T. HENNING whose telephone number is
15 (571)272-3790. The examiner can normally be reached on M-F 8-4.

16 If attempts to reach the examiner by telephone are unsuccessful, the examiner's
17 supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the
18 organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew T Henning/
Examiner, Art Unit 2131
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2131